

Title (en)  
PARKING ASSISTANCE DEVICE

Title (de)  
PARKHILFEVORRICHTUNG

Title (fr)  
DISPOSITIF D'ASSISTANCE AU STATIONNEMENT

Publication  
**EP 3135564 A1 20170301 (EN)**

Application  
**EP 16181847 A 20160729**

Priority  
JP 2015152504 A 20150731

Abstract (en)  
A parking assistance device includes: a route determination unit (144) that determines a route from an initial position (PS) of a vehicle (1) to a target parking position (PT) when assisting the vehicle to be parked in a parking area, and includes, a first generation unit (1441) generating a first circumference tangent to a line passing through the initial position and extending along a forward direction of the vehicle, and a second generation unit (1442) generating a second circumference having a tangent line passing through a rear position of the vehicle at a rear direction of the target parking position in the forward direction and extending along the forward direction, and having a radius of minimum turning of the vehicle, a part of the first circumference functions as a part of the route, and a part of a third circumference functions as the route subsequent to the first circumference.

IPC 8 full level  
**B62D 15/02** (2006.01)

CPC (source: EP US)  
**B62D 15/027** (2013.01 - EP US); **B62D 15/028** (2013.01 - US); **B62D 15/0285** (2013.01 - EP US); **G01C 21/3407** (2013.01 - US); **G01C 21/3629** (2013.01 - US); **G01C 21/3647** (2013.01 - US); **G08G 1/168** (2013.01 - US)

Citation (applicant)  
JP 2006508850 A 20060316

Citation (search report)  
• [XAY] US 2015025732 A1 20150122 - MIN KYOUNGWOOK [KR], et al  
• [A] EP 2471696 A2 20120704 - DELPHI TECH INC [US]  
• [A] DE 102009027289 A1 20101118 - BOSCH GMBH ROBERT [DE]  
• [A] DE 102009025328 A1 20101230 - VALEO SCHALTER & SENSOREN GMBH [DE]  
• [Y] JP 2005035498 A 20050210 - TOYOTA MOTOR CORP, et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3135564 A1 20170301**; **EP 3135564 B1 20190403**; JP 2017033277 A 20170209; JP 6569362 B2 20190904; US 10055994 B2 20180821; US 2017032679 A1 20170202

DOCDB simple family (application)  
**EP 16181847 A 20160729**; JP 2015152504 A 20150731; US 201615223164 A 20160729